

**Work Order ID 63025**

Page 1

October 18, 2010 10:13:48 AM

Item ID: D4121-5

Accept



Setup Start



Revision ID:

Item Name: Hose Assembly

Stop



Start Date: 10/18/10 Start Qty: 1.00



Cust Item ID:

Required Date: 10/25/10 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan: CL

Date: 10/10/18

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
----------	--------------

D4121

A

100



PURCHASING

Purchasing

Memo

Create D2729-1 label and include with W/O

Issue P/O: 12755

Hose Assembly as per Dwg D4121

Possible Supplier: API

Material release note is required

CL 10/10/18 ①

110



Receive &amp; Inspect for Damage &amp; Mat'l Certs

0.00

Packaging

Memo

Ensure Material Release Note is attached

Packaging

CL 10/10/18 ①

CERTIFICATE OF CONFORMITY
REQD UPON DELIVERY

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**Work Order ID 63025**

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Page 2

Item ID: D4121-5

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Start



Revision ID:

Item Name: Hose Assembly

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Start Date: 10/18/10 Start Qty: 1.00



Cust Item ID:

Required Date: 10/25/10 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

120



QC

Quality Control

Memo Aluminum Fittings 0.00  
for conformity. see  
attached e-mail.

1

10/10/28

130



Small Fab

Small Fab

0.00

Memo

0.00

Small Fab

Install D2729-1 as per Dwg D4121  
using D2182-045 Heat Shrink  
Batch: B21864

G.10/10/26 ①

140



Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

S.10/10/26

④

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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**Work Order ID 63025**

Page 3

October 18, 2010 10:13:48 AM

Item ID: D4121-5

Accept



Setup

Start



Revision ID:

Item Name: Hose Assembly

Stop



Start Date: 10/18/10 Start Qty: 1.00



Cust Item ID:

Required Date: 10/25/10 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

150



Packaging

Identify as per dwg &amp; Stock Location:

0.00

D. Devar

P/Off 10/10/10

Packaging

Memo

PM 6305

0.00

160



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

A. 10.10.26 Conformity  
onlyMF  
10-11-02

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

# Picklist Print

October 18, 2010 10:13:48 AM

Page 1

Work Order ID: 63025



Parent Item: D4121-5



Parent Item Name: Hose Assembly

Start Date: 10/18/10

Required Date: 10/25/10

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A NEW ISSUE 10-10-05 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
156062D1054S00		Purchased		No		100	Each	0.0000	1	1			

Hose Assembly

156062 D1054 D0000 aluminum fittings

10/18/2010

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

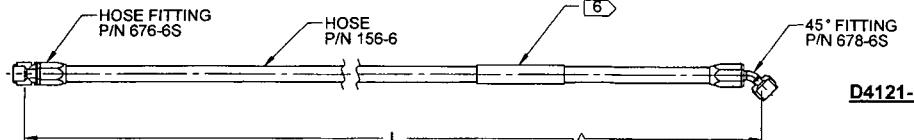
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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NOTE: Date & initial all entries

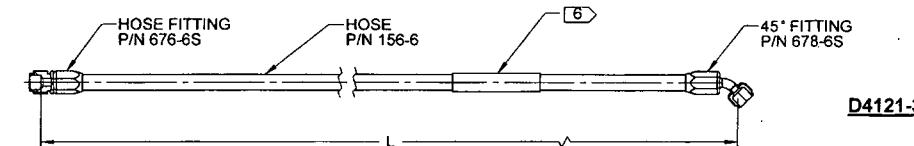
8 7 6 5 4 3 2 1



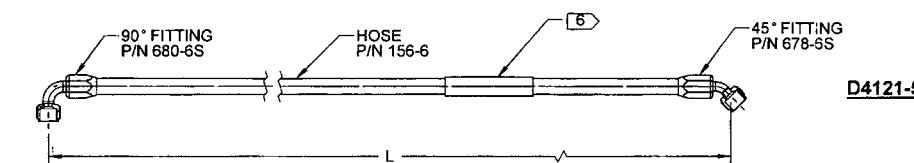
D4121-1

HOSE SPECIFICATION			
DART P/N	STRATOFLEX P/N	VENDOR	L
D4121-1	156003-6S0274	API	27.50
D4121-3	156003-6S0570	API	57.00
D4121-5	156062D105450	API	105.50'

Doc



D4121-3



D4121-5

CL1010118

W10.63025

RELEASED  
2010-09-23  
W4

NOTES:  
 1) MATERIAL: N/A  
 2) FINISH: N/A  
 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED  
 4) UNITS: INCHES UNLESS OTHERWISE NOTED  
 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX  
 6) IDENTIFICATION: IDENTIFY WITH DART P/N & B/N USING D2729-1 LABEL INSTALLED WITH D2182-045 HEAT SHRINK  
 7) WEIGHT: N/A  
 8) HOSE ASSEMBLIES TO MEET THE REQUIREMENTS OF TSO-C53a TYPE "A"

8 7 6 5 4 3 2 1

A	NEW ISSUE	RF	10.09.16
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
DRAWN	RF		
CHECKED	<i>WJ</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>WJ</i>	D4121	SHEET 1 OF 1
APPROVED	<i>WJ</i>	TITLE	SCALE
DE APPR.	<i>WJ</i>	HOSE ASSEMBLIES	NTS
DATE	10.09.16	COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

A

1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

## L Lacelle

**From:** David Shepherd [dshepherd@dartaero.com]  
**Sent:** October 15, 2010 5:22 PM  
**To:** 'L Lacelle'; 'Robert Fuentes'  
**Subject:** RE: hose quote

Linda,

These parts will be acceptable for conformity  
But ERA is insisting on stainless steel for production.  
What will be the cost and lead time on the stainless steel for production?

Thanks,  
David

---

**From:** L Lacelle [mailto:llacelle@dartaero.com]  
**Sent:** Friday, October 15, 2010 8:51 AM  
**To:** 'David Shepherd'; 'Robert Fuentes'  
**Subject:** FW: hose quote  
**Importance:** High

Hi Guys,  
Please advise if you would like to proceed with these hoses... and if this will be the ones we will also use  
in the future..  
Thx  
Linda

---

**From:** Laura McClelland [mailto:lmcclelland@aviall.com]  
**Sent:** October 15, 2010 10:53 AM  
**To:** L Lacelle  
**Subject:** hose quote

Ok - here we go - below is part numbers for the hoses with aluminium fittings....all can be shipped in 3-4 days after order.

156003-6D0274	131.58	(D4121-1)
156003-6D0570	165.00	(D4121-3)
156062D1054D000	271.74	(D4121-5)

If you want to proceed with these options, please send a revised P.O. and attached is a blank hose order form that will need to be completed.

Again my apologies for missing the lead time on the original quotation.

Thank you

Laura McClelland  
Sr. Customer Service Rep.

Aviall Toronto  
Phone: 905-676-1695  
Fax: 905-676-9046  
Cisco: 843011

As of today, please send quotes and orders to the new email address: [toronto@aviall.com](mailto:toronto@aviall.com)

Any Aviall quote or acknowledgement/acceptance of your purchase order is made subject to your acceptance of Aviall's Terms and Conditions of Sales that shall replace and supersede your proposed terms and conditions for all purposes.

From: "L Lacelle" <[llacelle@dartaero.com](mailto:llacelle@dartaero.com)>  
To: ""Laura McClelland"" <[lmcclelland@aviall.com](mailto:lmcclelland@aviall.com)>  
Date: 10/14/2010 08:52 AM  
Subject: RE: HOSE P.O.

Laura, Laura, Laura...  
What are we going to do with you?????  
If we used aluminum fittings, can we get it sooner???

LL

**From:** Laura McClelland [<mailto:lmcclelland@aviall.com>]  
**Sent:** October 12, 2010 4:08 PM  
**To:** L Lacelle  
**Subject:** HOSE P.O.

OMG - don't hate me - I misread the fine print on the quote from the hose shop - lead time is 16 weeks after order.....Chantal sent me the P.O. for the hoses.

I have not entered - let me know if you still want me to proceed or if you want to cancel

I am so sorry about that, totally my fault.

Thank you

Laura McClelland  
Sr. Customer Service Rep.  
Aviall Toronto  
Phone: 905-676-1695  
Fax: 905-676-9046  
Cisco: 843011

As of today, please send quotes and orders to the new email address: [toronto@aviall.com](mailto:toronto@aviall.com)

Any Aviall quote or acknowledgement/acceptance of your purchase order is made subject to your acceptance of Aviall's Terms and Conditions of Sales that shall replace and supersede your proposed terms and conditions for all purposes.

----- Forwarded by Laura McClelland/Toronto/Aviall on 10/12/2010 04:05 PM -----

From: Laura McClelland/Toronto/Aviall  
To: "L Lacelle" <llacelle@dartaero.com>  
Date: 10/07/2010 12:19 PM  
Subject: Re: rfq

-----

Hello my little boo boo bum.....you had the stratoflex part numbers on the drawing so that is what I'm quoting

156003-6S0274	332.44	2-3 days
156003-6S0570	356.68	2-3 days
156062D1054S000	402.63	2-3 days

Thank you

Laura McClelland  
Sr. Customer Service Rep.  
Aviall Toronto  
Phone: 905-676-1695  
Fax: 905-676-9046  
Cisco: 843011

As of today, please send quotes and orders to the new email address: toronto@aviall.com

Any Aviall quote or acknowledgement/acceptance of your purchase order is made subject to your acceptance of Aviall's Terms and Conditions of Sales that shall replace and supersede your proposed terms and conditions for all purposes.

From: "L Lacelle" <llacelle@dartaero.com>  
To: "Laura McClelland" <lmcclelland@aviall.com>  
Date: 10/07/2010 11:23 AM  
Subject: rfq

Hi Laura-Poo,  
Could you please advise P & D on:

5 x D4121-1  
5 x D4121-3  
5 x D4121-5  
Per attached drwg.

Thank You,  
Linda Lacelle  
Production Manager  
Dart Aerospace Ltd

---

This e-mail message, including attachments, may contain confidential, proprietary, or export controlled information. Any unauthorized disclosure, distribution, or other use is prohibited, unless expressly authorized. If you receive this e-mail in error, please notify the sender, and delete all copies of the original message from your systems.

No virus found in this incoming message.  
Checked by AVG - [www.avg.com](http://www.avg.com)  
Version: 8.5.448 / Virus Database: 271.1.1/3197 - Release Date: 10/14/10 18:34:00



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID **PO12755**

Purchase Order Date 10/18/10  
PO Print Date 10/18/10

Page Number 1 of 2

Order From : VC-AVI001

AVIALL  
PO BOX 9534 STATION A  
TORONTO, ON M5W 2K3  
CA

Contact Name	Buyer	Chantal Lavoie
Vendor Phone	Requisition Nbr	
Vendor Fax	Tax Resale Nbr	10127-2607
Vendor Account Nbr	Terms	Net 30
	Currency	CAD
	FOB	Destination-Collect

Ship To : DART AEROSPACE LTD 1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

**FAXED**  
*Fax to DART*

Line Nbr	Reference Revision ID	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	156003-6S0274	Hose Assembly	10/22/10 Yes	✓ 2.00 Each	FedEx PI ppd	\$131.5800	\$263.16

Special Inst: AS PER DWG D4121 REV. A  
B63023  
P/N: 156003-6D0274 WITH ALIMINUM  
FITTING

2	156003-6S0570	Hose Assembly	10/22/10 Yes	✓ 1.00 Each	FedEx PI ppd	\$165.0000	\$165.00
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Special Inst: AS PER DWG D4121 REV. A  
B63024  
P/N: 156003-6D0570 WITH ALUMINUM  
FITTING

3	156062D1054S0	Hose Assembly	10/22/10 Yes	✓ 1.00 Each	FedEx PI ppd	\$271.7400	\$271.74
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Special Inst: AS PER DWG D4121 REV. A  
B63025  
P/N: 156062D1054D000 WITH  
ALUMINUM FITTING

No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required when applicable

Change Nbr: 1

Change Date: 10/18/10



# PACKING LIST



CUSTOMER P.O.: 12755

BON DE COMMANDE ORDER NUMBER: 0000939309- 276311

No DE COMMANDE

ORDER DATE: 10/18/10

006166  
 S DART AEROSPACE LTD  
 O 1270 ABERDEEN STREET  
 V HAWKESBURY ON K6A 1K7  
 L D HAWKESBURY ON K6A 1K7  
 E CANADA  
 D T O A

S E DART AEROSPACE LTD  
 O X 1270 ABERDEEN STREET  
 V H P D HAWKESBURY ON K6A 1K7  
 L E T E CANADA  
 E D R O A

SHIP NBR:  
No DE EXPEDITEUR 276311SHIP VIA: FED P1AM - COLLECT  
EXPEDIER PAR
 PAGE: 1  
 DATE: 10/20/10  
 TIME/HEURE: 10:28  
 EMP#: 22611  
 ORDER TYPE / TYPE DE COMMANDE: RG  
 CURRENCY: CAN

S E 34170  
 O X AVIALL TORONTO CSC  
 V H P I 1840 ALSTEP DR. UNIT 5.  
 L E T D I MISSISSAUGA ON L5S 1W1  
 E D R E CANADA  
 D T O M E

LINE	MFG	ITEM DESCRIPTION	ORDER QUANTITY QUANTITE COMMANDE	SHIP QUANTITY QUANTITE EXPEDIEE	BACK ORDER COMM. EN SOUF	UOM	LIST PRICE	CUSTOMER PRICE	EXTENDED CUSTOMER PRICE
PLEASE SHIP FEDEX P1 ON CUSTOMER ACCOUNT NUMBER 1517-9324-0, AWB# MUST REFERENCE THE PURCHASE ORDER NUMBER									
1	1S	156003-6D0274 HOSE ASSY REF HS951HD0274 Schedule B: 8803300010	2	2	0 EA	131.58	131.5800	131.5800	263.16
		LOT 51226526 EA		2					
2	1S	156003-6D0570 HOSE ASSY Schedule B: 8803300010		1	1	0 EA	165.00	165.0000	165.00
		LOT 51226527 EA		1					
3	1S	156062D1054D000 HOSE ASSY Schedule B: 8803300010		1	1	0 EA	271.74	271.7400	271.74
		LOT 51226528 EA		1					

Aviall is not providing OEM parts. Aviall is an authorized Stratoflex distributor providing TSO assemblies. Numbers referenced per customer requirements are for customer reference ONLY and are in no way intended to be represented as OEM parts. Any reference to an OEM part number does not authorize or reflect installation authority for this part. The installation authority is provided

## CERTIFICATE OF CONFORMANCE / CERTIFICAT DE CONFORMITE

I hereby certify that the aircraft parts, appliances and/or aircraft materials described hereon were acquired from a source of supply that is consistent with the conditions under which the department of transport distributor approval number 35-86 has been granted.

Je certifie par la presente que les pieces appareils et/ou materiaux d'avions decrits ci-dessus ont ete acquis d'une source d'approvisionnement consistante avec les conditions sous lesquelles l'approbation du distributeur du department du transport no. 35-86 ont ete recue.

DISCOUNT TERMS APPLY ONLY TO SUB TOTAL.  
 ESCOMPTES APPLIQUES SUR SOUS TOTAL SEULEMENT.  
 ALL RETURNED MERCHANDISE SUBJECT TO A HANDLING FEE.  
 FRAIS DE MANUTENTION APPLIQUES SUR TOUTE MARCHANDISE RETOURNEE.

CUSTOMER COPY / FILE COPY



# PACKING LIST



PAGE: 2  
DATE: 10/20/10

TIME/HEURE: 10:28  
EMP#: 22611

ORDER TYPE / TYPE DE COMMANDE: RG  
CURRENCY: CAN

CUSTOMER P.O.: 12755  
BON DE COMMANDE  
ORDER NUMBER: 0000939309- 276311  
No DE COMMANDE  
ORDER DATE: 10/18/10  
DATE DE COMMANDE

SHIP NBR:  
No DE EXPEDITEUR

SHIP VIA: FED P1AM - COLLECT  
EXPEDIER PAR

006166  
S DART AEROSPACE LTD  
O 1270 ABERDEEN STREET  
V HAWKESBURY ON K6A 1K7  
E CANADA  
L D  
E T  
D U  
A T  
O O  
R A

S E DART AEROSPACE LTD  
H P 1270 ABERDEEN STREET  
I E HAWKESBURY ON K6A 1K7  
P D CANADA  
T E R  
O A

S E 34170  
H X AVIALL TORONTO CSC  
I P 1840 ALSTEP DR. UNIT 5.  
P D MISSISSAUGA ON L5S 1W1  
F E CANADA  
R R  
O D  
M E

LINE	MFG	ITEM DESCRIPTION	ORDER QUANTITY QUANTITE COMMANDE	SHIP QUANTITY QUANTITE EXPEDIEE	BACK ORDER COMM. EN SOUF	UOM	LIST PRICE	CUSTOMER PRICE	EXTENDED CUSTOMER PRICE
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by the mechanic installing this product in accordance with FAR Part 43.

PARTS TOTAL	699.90
AOC TOTAL	0.00
TAXES	90.99
FREIGHT	0.00
FUEL SURCHARGE	0.00
ESTIMATED TOTAL	790.89

Currency: Canadian Dollar

I hereby certify that the aircraft parts, appliances and/or aircraft materials described hereon were acquired from a source of supply that is consistent with the conditions under which the department of transport distributor approval number 35-86 has been granted.  
Je certifie par la presente que les pieces appareils et/ou materiaux d'avions decrits ci-dessus ont ete acquis d'une source d'approvisionnement consistante avec les conditions sous lesquelles l'approbation du distributeur du department du transport no. 35-86 ont ete recue.

CST REC NO R121506208

Signed

Date 10/20/10

DISCOUNT TERMS APPLY ONLY TO SUB TOTAL.  
ESCOMPTES APPLIQUES SUR SOUS TOTAL SEULEMENT.  
ALL RETURNED MERCHANDISE SUBJECT TO A HANDLING FEE.  
FRAIS DE MANUTENTION APPLIQUE SUR TOUTE MARCHANDISE  
RETOURNEE.

CUSTOMER COPY / FILE COPY